

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Listing of Claims:

Claims 1-15 (Canceled)

Claim 16 (Currently Amended): An image forming apparatus for correcting color difference and position difference based on a unique correction data related to a transfer belt unit, the image forming apparatus comprising:

a controller configured to read the unique correction data stored in a first memory contained in the transfer belt unit connected to a main body of the image forming apparatus, and transfer the unique correction data from the first memory to a second memory contained in the main body of the image forming apparatus; and

a correction control unit configured to correct the color difference and position difference based on the unique correction data stored in the second memory,

wherein the unique correction data includes an average velocity value of a rotation of the transfer belt based on multiple velocity measurements made along the rotation of the transfer belt.

Claim 17 (Previously Presented): The image forming apparatus according to claim 16, wherein the unique correction data is stored in the first memory prior to incorporation of the transfer belt unit into the main body of the image forming apparatus.

Claim 18 (Currently Amended): The image forming apparatus according to claim 16, wherein the average value of the unique correction data is a travel average speed for plural blocks of the transfer belt divided perpendicularly with respect to a travel direction of the

transfer belt calculated based on multiple measurements of passages times of plural reference marks on the transfer belt.

Claim 19 (Previously Presented): The image forming apparatus according to claim 16, wherein the controller is configured to transfer the correction data stored in the first memory to the second memory when the transfer belt unit is detached and reattached or replaced with another transfer belt unit.

Claim 20 (Previously Presented): The image forming apparatus according to claim 16, wherein the transfer belt is provided with plural reference marks fixedly pre-formed on the transfer belt.

Claim 21 (Previously Presented): The image forming apparatus according to claim 20, further comprises:

a mark detector configured to detect the reference marks on the transfer belt, and output a mark detection signal upon detection of the reference marks;

a plurality of photosensitive drums provided in contact with the transfer belt;

a plurality of toner tanks each of which is configured to supply toner to a corresponding photosensitive drum; and

a plurality of laser optical systems each of which is configured to form an image on a corresponding photosensitive drum upon output of the mark detection signal.

Claim 22 (Previously Presented): The image forming apparatus according to claim 21, wherein the transfer belt is an endless track forming a loop, and the transfer belt unit further comprises:

a driving roller provided at one end and inside of the loop of the transfer belt and configured to drive the transfer belt, and a following roller provided at another end and inside of the loop of the transfer belt and configured to follow the driving roller; and

a plurality of primary transfer rollers provided inside of the loop of the transfer belt, each of which is configured to press the transfer belt towards a corresponding photosensitive drum.

Claim 23 (Previously Presented): The image forming apparatus according to claim 16, wherein the transfer belt is an endless track forming a loop, and the transfer belt unit further comprises a driving roller provided at one end and inside of the loop of the transfer belt and configured to drive the transfer belt, and the image forming apparatus further comprises a printing control system provided with the data storage unit and configured to control the driving roller to adjust a speed of the transfer belt based on the correction data transferred to the data storage unit.

Claim 24 (Previously Presented): The image forming apparatus according to claim 16, wherein the first memory comprises an electronically erasable and programmable read only memory.